

ABSTRACT OF THE DISCLOSURE

5 A satellite, in particular a telecommunication satellite, comprises a structure having a north face and a south face that are oriented perpendicularly to the rotation axis of the Earth and an east face and a west face that are periodically exposed to solar radiation as the satellite orbits the Earth. The structure supports equipment dissipating heat, the north, south, east and west faces constituting radiator panels that radiate into space heat dissipated by the equipment. The satellite comprises at least one shelf to support the equipment and a heat transfer for transferring heat dissipated  
10 by the equipment to the north, south, east and west radiator panels and comprising at last one capillary pumped two-phase fluid loop comprising at least one evaporator thermally connected to the equipment supported by the shelf, a heat exchange fluid circulation branch being associated with each of the north, south, east and west faces, and each branch comprising  
15 a heat exchange fluid condenser thermally connected to the face with which that branch is associated.